ORGANIC AGRICULTURE – A NECESSITY OR AN IRRELEVANCE IN THE CREATION OF A SUSTAINABLE SOCIETY?

A paper by Lawrence Woodward, Director Elm Farm Research Centre, delivered to the World Civil Society Forum in Geneva, on 16th July 2002.

There are people in all countries - rich and poor - that argue that organic agriculture is vital for the promotion of the sustainable society we need to protect our world. There are others who say it is merely a marketing niche and irrelevant in the task of tackling the massive environmental, social and economic problems that beset us. A third view is that up to the farm gate organic farming gives tangible environmental and food quality benefits, but that these are frittered away and lost in the processing, packaging and transportation of the global food system that it has embraced.

I believe that organic agriculture is vital to the development of a truly sustainable and equitable world but only if those who support it and practice it turn their backs on the conventional global food systems and lead the way in the development of initiatives that are more in line with those pioneering principles set out by Lady Eve Balfour at the first IFOAM conference here in Switzerland in 1977: *"The criteria .....can be summed up in one word "permanence", which means adopting techniques that maintain soil fertility indefinitely; that utilise, as far as possible, only renewable resources; that do not grossly pollute the environment, and that foster life-energy (or if preferred biological activity) within the soil and throughout the cycles of all the involved food-chains."* [1]

Two things are notable here - the use of the word *"permanence"* and the phrase *"throughout the cycles of all the involved food-chains"*. Without doubt the concept underlying organic agriculture can and should have a significance and role beyond the farm gate. It stretches to all parts of the chain from the field to the table and encompasses storage, distribution, preparation and consumption and any processing in between.

In the run up to the so called *"Earth Summit"* (August 2002) it is hardly necessary to remind you how close we are to the edge of an environmental catastrophe which, if we allow it to happen, will destroy all remnants of a civilised society. The recent WWF report *"The Living Planet"* [2] - warning that we will effectively run out of natural resources by 2050 if our current rate of exploitation continues - is only the latest of many alarm calls.

All the signs point to a future where primary goods such as food and primary resources such as soil and water will be scarce and vulnerable. An economic sector such as organic agriculture that produces one and conserves the other can lead the way to wider economic and social recovery.

I will say more about this in a moment. First I would like to use the example of energy to show just how close we are to the abyss.

The graph below, **Four Oil Shocks**, shows the amounts of total hydrocarbons. These figures are from the International Energy Agency [3] - an OECD agency set up to provide impartial information. And this is it - there are no new fields around the corner to bale us out as there were in the 1970s.

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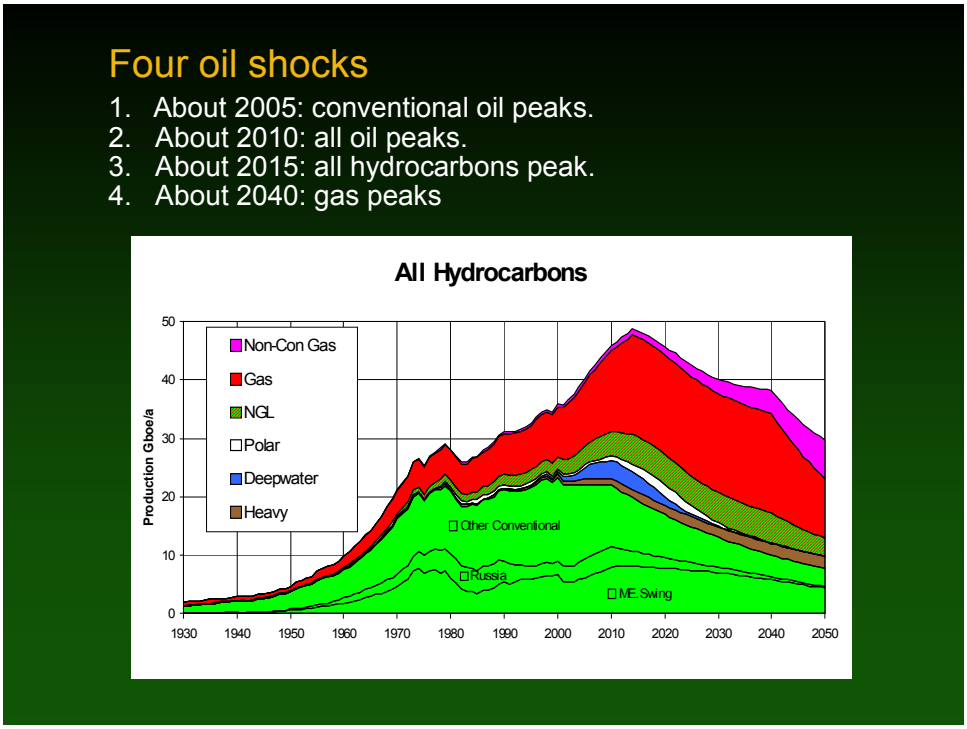

The clocks are ticking for both oil and gas - worldwide.

The point is that oil does not have to run out to have a massively adverse impact on the world economy, society and politics. In the absence of alternatives, shortages leading to large-scale disruption, dislocation and the consequent political responses will occur long before the resource reaches its limit.

The graph below, Oil Supply Profiles[4], takes a closer look at oil demand, supply and reserves; demand shows no sign of abating; unconventional reserves are a fictitious balancing item.

Figure 7.7: Oil Supply Profiles 1996-2030
Ultimate Conventional Oil Reserves of 2300 Billion Barrels

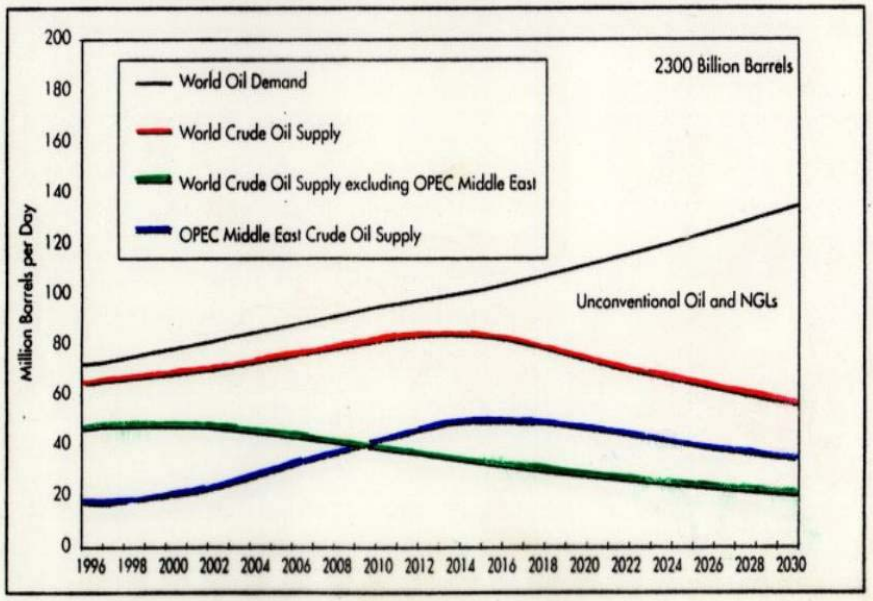

Table 7.12: Oil Supply 1996-2020 (million barrels per day)

I have drawn attention here to energy but similar scenarios can be presented for water, soil and air.
I would like though to stay with energy for a little longer and look at where agriculture and the food system fit into this.

An FAO conference in 1999 concluded that: Agriculture remains a principal force in sustaining the operation and growth of the whole economy, even in highly industrialised societies with small farm populations. Indeed, agriculture and the food system is a central driver in the pursuit of growth in the global economy and, as such, is a major user and abuser of finite resources.

"Oil does not have to run out to have a massively adverse impact on the world economy, society and politics."

For example trade-related transportation accounts for one eighth of world oil consumption and is a significant source of greenhouse gases and it has been estimated that the food system makes up nearly 40% of that use. International trade in food almost trebled in the 30-years up to 2000 with increases in almost all commodities.

The argument is often made that this kind of trade is essential to the economic well being of the developing world and should be encouraged. But it does come at a price, sometimes threatening domestic food security; often to the detriment of a healthy diet for local people.

For example, in 1979, Kenya produced 465,000 tonnes of vegetables and exported 5 per cent of this output (24,000 tonnes). By 1999 vegetable production had increased to 663,000 tonnes, and 9 per cent of this was exported (61,000 tonnes). However, over this period, per capita vegetable consumption in Kenya decreased substantially from 25.1 to 18.1 kilograms per person per year (a 39 per cent reduction). Over the same period Kenyan fruit exports almost doubled from 68,000 tonnes to 121,000 tonnes and again domestic consumption declined from 30.5 to 26.5 kilograms of fruit per person per year. In 1999 the world average consumption of vegetables and fruit was 97.2 and 59.7 kilograms per person per year, respectively. This means that in that year Kenyan vegetable consumption was only a fifth of, and fruit consumption was less than half, the world average.

The nutrition and health status of society is a consequence and a reflection of its driving force; the system of food production is one part of that driver. In a growth and consumption driven civilisation, to quote Dennis T Avery of The Hudson Institute:
"People are not content with the low quality protein from vegetable sources. In every country where incomes are rising, demand is rising rapidly for cooking oil, pork, fed lamb, eggs, poultry and other resource-costly foods that provide higher quality protein"5

He does not say cheaply and therefore intensively, but that is what he means. Nor does he mention the "western diseases" that follow this "western" diet; heart disease, diabetes, cystic fibrosis, hypertension, liver disease, obesity and cancers.

I do not believe the world can afford for much longer an agriculture and food system that is so costly in environmental and human resources.

A more appropriate response to the catastrophic threat which is facing the world is to take up the task set by E. F. Schumacher in his *book "Small is Beautiful":*
...to replace our growth and consumption based economy "by evolving a new lifestyle, with new methods of production and new patterns of consumption: a lifestyle designed for permanence". This lifestyle must be built upon the principle of limitation, "because the environment in which it is placed is strictly limited". It must only employ methods and equipment "which are cheap enough so they are

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accessible to virtually everyone; suitable for small-scale application; and compatible with Man's need for creativity." Out of these three characteristics "is born non-violence and a relationship of Man to nature which guarantees permanence" [6] .

Schumacher gave three, what he called *"preliminary examples"* of activities that could make significant contributions to the evolution of a world of *"Peace and Permanence"*. The one he was most associated with was intermediate technology, *"technology with a human face"* as he called it. Another was new forms of partnerships, even common ownership. But the example he gave first of all was organic farming.

Building an agriculture and food system on the fundamental characteristics of organic farming; self-regulating metabolic cycles tending towards closed systems, the use of local resources, the reduction in the use of fossil fuel, the employment of appropriate technology, the use of decentralised systems for production, processing and distribution seem to me to be the best way to respond to the environmental, economic and social collapse of which this planet is on the brink.

Indeed, I see it as the responsibility of the international organic movement to initiate and carry through that response.

It also makes sense for a number of realistic and practical reasons.

- More than any other economic sector, agriculture, if practised organically, is able to combine efficient production within the limits of a finite and fragile eco-system.
- All the signs point to a future where primary goods such as food and primary resources such as soil and water will be scarce and vulnerable. An economic sector such as agriculture that produces one and conserves the other can lead the way to wider economic and social recovery.
- The monolithic and undemocratic global economy has been found wanting on many counts; future economic development should be based on ecologically appropriate regions which should enable essential goods and services and, in particular, primary goods such as food, to be supplied equitably to all.
- In the pre-market economy era, reciprocal obligation within a fairly immediate level of local and regional community provided a powerful driver for maintaining social cohesion, by being an integral part of the economic and social structure. This requires an active participatory economic democracy that becomes less effective beyond the borders of a shared regional culture.
- Local processing of organic produce can be a source and fulcrum of wider economic and social development, showing the way for the evolution of a strong internal regional market that in turn can form the basis of appropriate trading relationships with other regions, even to the international level.

This may come across as glib and eco-romantic. Even worse it may meet the same fate as a bland sacred cow - universal approval whilst being ignored. I am also profoundly aware of the shortcomings of the organic system as it is developing in some ways today. For example it has been estimated that a single shopping basket made up of 26 certified organic items imported into the UK results in 84 kg of carbon dioxide emissions which is the equivalent of 8 per cent of the average annual emissions of one person in Africa [7].

Nonetheless there are organic farmers and there are examples of organic food systems in all parts of the world where, with appropriate technology, skill, energy and enterprise the monumental problems of the unsustainable and flawed global economy are being confronted.

One example is in the Dominican Republic, where a long-standing project has revitalised a rural area

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through firstly reclaiming land and then producing food organically. Passing on the skills to grow food led to wider education and tackling issues of gender, health care and decision-making structures. By the effort of seeking to produce food for themselves, that community found its way from achieving food security to developing a local economy that could build houses, bring in a modest outside income from selling surplus produce, educate its own children and train people from other villages, all within a socially equitable community democracy and local ecological resources.

This to me is testimony to the fact that organic agriculture - true to itself - is vital to bringing about a future of equity, permanence and peace.

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